

REMARKS

In the Action, claims 1-37 are rejected. In response, claims 1-37 are cancelled and new claims 38-44 are added. The pending claims in this application are claims 38-44, with claim 38 being the sole independent claim. Claim 38 corresponds substantially to original claim 1 and further recites the p-type layer and the n-type layer being in the same layer on the substrate as shown in the figures and described in the specification. The dependent claims correspond substantially to the original claims. Accordingly, these claims are supported by the specification, claims and drawings as originally filed.

In view of these amendments and the following comments, reconsideration and allowance are requested.

The Rejections

Claims 1 and 4-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,461,922 to Gay et al., and claims 2, 3 and 7-37 are rejected under 35 U.S.C. § 103(a) as being obvious over Gay et al. in view of U.S. Patent No. 4,865,999 to Xi et al.

Claims 1-37 are cancelled and replaced with new claims 38-44 to obviate these rejections. Independent claim 38 is not anticipated by or obvious over the cited patents. Specifically, the cited patents and particularly Gay et al. do not disclose or suggest a photovoltaic device comprising a plurality of photovoltaic cells of the p-i-n type placed on a first substrate where the photovoltaic cells are parallel to one another and have electrically conductive layers connecting the p-type layer of each cell with an n-type layer of an adjacent cell and where the p-type layer and n-type layer of the photovoltaic cell are located in the same layer on the first substrate parallel to one another and on top of the electrically conductive layer and where the p-type layer and the n-type layer are of equal thickness.

The solar cell module disclosed in Gay et al. has the p-type layer and the n-type layer of adjacent cells on opposite sides on the substrate. See, for example, the figures of Gay et al. Thus, Gay et al. does not disclose the p-type layer and n-type layers located in the same layer on the first substrate parallel to one another and on top of the electrically conductive layer as recited in independent claim 38. Accordingly, claim 38 is not anticipated by or obvious over the art of record.

The dependent claims are also allowable over the art of record for reciting additional features of the invention that are not disclosed or suggested in the art of record. For example, the cited art either standing alone or in combination do not disclose the materials of the photovoltaic cell as in claim 39, in combination with the features of claim 38.

The cited patents also fail to disclose the photovoltaic cells being formed in one layer separated by gaps on a second substrate where the side of each i-type layer of the cells are electrically connected to the p-type layers of the cell and the other side of the i-type layer is electrically connected to the end type layer and where the electrical connections between the photovoltaic cells are formed using conductive wiring as in claim 40, or varying the width between the gaps of the i-type layers to adjust the peak wavelength in the photosensitivity of the photovoltaic device as in claim 41, either alone or in combination with the features of claim 38.

The cited art also fails to disclose the first and second substrates being formed of glass defining a top side and a bottom side so that the i-type layer on the second substrate faces the layer containing both the p-type layer and the n-type layer and where the photovoltaic device is sufficiently transparent to enable use as glazing for buildings as in claim 42. The cited patents further fail to disclose the method of forming the photovoltaic device by chemical vapor deposition as in claims 43 and 44 to produce the photovoltaic device of claim 38.

In view of these amendments and the above comments, reconsideration and allowance are requested.

Respectfully submitted,



Garrett V. Davis
Reg. No. 32,023

Roylance, Abrams, Berdo & Goodman, L.L.P.
1300 19th Street, N.W., Suite 600
Washington, D.C. 20036
(202) 659-9076

Dated: Sept 16, 2007